From: Kent D Becher

To: <u>Shawn Ghose/R6/USEPA/US@EPA</u>

Cc: Donald Williams/R6/USEPA/US@EPA; Carlos Sanchez/R6/USEPA/US@EPA; Kent D Becher

Subject: Laboratory analysis for Arkwood - Resend with attachment

**Date:** 09/19/2011 02:33 PM

## Hi Shawn,

I met with Wren, Charles, Don, and others last Wednesday to discuss USGS priorities and the liaison position. During the meeting, the role of the liaison was discussed and there are several things that I have been doing for RPMs that go against the IAG and I am not allowed to do anymore. This includes writing work orders, contacting PRP contractors, and working with the Houston Lab for potential lab analysis.

Anyhow, please see e-mail below from the Houston lab. Since there is only one sample, they can run the sample and meet the reporting limit. You will have to arrange for this sample with the lab, put together a work order, and contact the PRP contractor for the next sampling event since I can no longer do this for you.

Please let me know when you want to collect the sample and I will arrange to have one of our Little Rock staff on site to collect it. The cost to collect a sample will be minimal and I can provide that information once you have set a date for the sampling and then that can be added to the work order. Work orders have to be approved before work can start.

#### Thanks.

Kent D. Becher
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Texas Water Science Center
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Cell 817-253-0356

---- Forwarded by Kent D Becher/WRD/USGS/DOI on 09/19/2011 02:25 PM -----

From: Warren.Christy@epamail.epa.gov
To: Helmick.Walt@epamail.epa.gov

Cc: Kent D Becher <kdbecher@usgs.gov>, Ghose.Shawn@epamail.epa.gov

Date: 09/14/2011 10:46 AM

Subject: Re: Fw: Laboratory analysis for Arkwood - Resend with attachment

# Walt,

There could be 2 options.

- 1. CLP can do it under the SIM option at 0.2 ug/L.
- 2. The EPA Region 6 Lab can analyze for PCP with a reporting limit of 1 ug/L.

With the potential FORMS II Lite issue listed below - I would recommend since we are only talking a sample or 2 to send them to the EPA Region 6 Lab. They will need to be scheduled in advance - but I'm sure we can accommodate them.

Christy Warren
U.S. EPA Region 6 Laboratory
Sample Control Center
10625 Fallstone Road
Houston, Texas 77099
warren.christy@epa.gov
Office: 281-983-2137

Cell: 281-415-6815 Fax: 281-983-2248

From: Walt Helmick/R6/USEPA/US
To: Christy Warren/R6/USEPA/US@EPA

Date: 09/14/2011 10:20 AM

Subject: Fw: Laboratory analysis for Arkwood - Resend with attachment

In your opinion would the USGS method that is in the attachment be "equivalent" to an EPA method.

Walter R. Helmick Superfund Quality Assurance Officer U.S.EPA Region 6 (6SF-D) 1445 Ross Ave. Dallas, TX 75202 helmick.walt@epa.gov

214-665-8373

---- Forwarded by Walt Helmick/R6/USEPA/US on 09/14/2011 10:18 AM -----

From: Kent D Becher <kdbecher@usgs.gov>

To: Shawn Ghose/R6/USEPA/US@EPA, Walt Helmick/R6/USEPA/US@EPA

Cc: Kent D Becher <kdbecher@usgs.gov>

Date: 09/13/2011 06:30 PM

Subject: Laboratory analysis for Arkwood

## Hi Shawn/Walt,

In a rare occurrence, I am having problems finding a lab that can meet the 5 ug/L for PCP for the Arkwood QA-split sampling that has been requested. I have attached a CLP table which includes PCP, but I am not sure what the SIM standards for in the first column for low water. If CLP can meet the .2 in this column then this might be the way to go, but if they can only get to the second low water column then you are are looking at 10 ug/L. We then run into the problem that no one in Arkansas has used CLP (Forms2Lite), but I might just have to make the trip out there for this single sample.

SOM01.2 Semivolatile Target Compound List and Corresponding CRQLs

# SOM01.2 CONTRACT REQUIRED QUANTITATION LIMITS

COMPOUND	CAS No. Low Water Low Water Low Soil Low Soil Me					
COMPOUND	CAS NO.		Low Water		Low Soil	Med. Soil
		by SIM (ug/L)	(ug/L)	by SIM (ug/kg)	(ug/kg)	(ug/kg)
Benzaldehyde	100- 52-7		5.0		170	5,000
<u>Phenol</u>	108- 95-2		5.0		170	5,000
Bis(2-chloroethyl) ether	111- 44-4		5.0		170	5,000
2-Chlorophenol	95-57- 8		5.0		170	5,000
2-Methylphenol	95-48- 7		5.0		170	5,000
2,2'-Oxybis(1- choloropropane)	108- 60-1		5.0		170	5,000
Acetophenone	98-86- 2		5.0		170	5,000
4-Methylphenol	106- 44-5		5.0		170	5,000
N-Nitroso-di-n propylamine	621- 64-7		5.0		170	5,000
<u>Hexachloroethane</u>	67-72- 1		5.0		170	5,000
<u>Nitrobenzene</u>	98-95- 3		5.0		170	5,000
<u>Isophorone</u>	78-59- 1		5.0		170	5,000
2-Nitrophenol	88-75- 5		5.0		170	5,000
2,4-Dimethylphenol	105- 67-9		5.0		170	5,000
Bis(2-chloroethoxy) methane	111- 91-1		5.0		170	5,000
2,4-Dichlorophenol	120- 83-2		5.0		170	5,000
<u>Naphthalene</u>	91-20- 3	0.10	5.0	3.3	170	5,000
4-Chloroaniline	106-		5.0		170	5,000

	47-8					
<u>Hexachlorobutadiene</u>	87-68- 3		5.0		170	5,000
Caprolactam	105- 60-2		5.0		170	5,000
4-Chloro-3-methylphenol	59-50- 7		5.0		170	5,000
2-Methylnaphthalene	91-57- 6	0.10	5.0	3.3	170	5,000
Hexachlorocyclopentadiene	77-47- 4		5.0		170	5,000
2,4,6-Trichlorophenol	88-06- 2		5.0		170	5,000
2,4,5-Trichlorophenol	95-95- 4		5.0		170	5,000
1,1'-Biphenyl	92-52- 4		5.0		170	5,000
2-Chloronaphthalene	91-58- 7		5.0		170	5,000
2-Nitroaniline	88-74- 4		10		330	10,000
Dimethylphthalate	131- 11-3		5.0		170	5,000
2,6-Dinitrotoluene	606- 20-2		5.0		170	5,000
<u>Acenaphthylene</u>	208- 96-8	0.10	5.0	3.3	170	5,000
3-Nitroaniline	99-09- 2		10		330	10,000
<u>Acenaphthene</u>	83-32- 9	0.10	5.0	3.3	170	5,000
2,4-Dinitrophenol	51-28- 5		10		330	10,000
4-Nitrophenol	100- 02-7		10		330	10,000
Dibenzofuran	132- 64-9		5.0		170	5,000
2,4-Dinitrotoluene	121- 14-2		5.0		170	5,000
Diethylphthalate	84-66- 2		5.0		170	5,000
<u>Fluorene</u>	86-73- 7	0.10	5.0	3.3	170	5,000

4-Chlorophenyl-phenyl ether	7005- 72-3		5.0		170	5,000
4-Nitroaniline	100- 01-6		10		330	10,000
4,6-Dinitro-2- methylphenol	534- 52-1		10		330	10,000
N-Nitrosodiphenylamine	86-30- 6		5.0		170	5,000
1,2,4,5- Tetrachlorobenzene	95-94- 3		5.0		170	5,000
4 – Bromophenyl – phenylether	101- 55-3		5.0		170	5,000
<u>Hexachlorobenzene</u>	118- 74-1		5.0		170	5,000
<u>Atrazine</u>	1912- 24-9		5.0		170	5,000
<u>Pentachlorophenol</u>	87-86- 5	0.20	10	6.7	330	10,000
<u>Phenanthrene</u>	85-01- 8	0.10	5.0	3.3	170	5,000
<u>Anthracene</u>	120- 12-7	0.10	5.0	3.3	170	5,000
Carbazole	86-74- 8		5.0		170	5,000
Di-n-butylphthalate	84-74- 2		5.0		170	5,000
<u>Fluoranthene</u>	206- 44-0	0.10	5.0	3.3	170	5,000
<u>Pyrene</u>	129- 00-0	0.10	5.0	3.3	170	5,000
Butylbenzylphthalate	85-68- 7		5.0		170	5,000
3,3'-dicholorobenzidine	91-94- 1		5.0		170	5,000
Benzo(a)anthracene	56-55- 3	0.10	5.0	3.3	170	5,000
<u>Chrysene</u>	218- 01-9	0.10	5.0	3.3	170	5,000
Bis(2-ethylhexyl) phthalate	117- 81-7		5.0		170	5,000
Di-n-octylphthalate	117- 84-0		5.0		170	5,000
Benzo(b) fluoranthene	205-	0.10	5.0	3.3	170	5,000

	99-2					
Benzo(k) fluoranthene	207- 08-9	0.10	5.0	3.3	170	5,000
Benzo(a) pyrene	50-32- 8	0.10	5.0	3.3	170	5,000
Indeno(1,2,3,-cd) pyrene	193- 39-5	0.10	5.0	3.3	170	5,000
Dibenzo(a,h) anthracene	53-70- 3	0.10	5.0	3.3	170	5,000
Benzo(g,h,i) perylene	191- 24-2	0.10	5.0	3.3	170	5,000
2,3,4,6-Tetrachlorophenol	58-90- 2		5.0		170	5,000

I have checked with our DODEC lab and they can't even come close to a reporting level of 5 ug/L. Another option is to go with the USGS National Water Quality Laboratory, but they use their own methodology which appears to be similar to method 8270D, but they use a long term detection method, so the reporting level is 6 ug/L at this point. I have included the OFR which includes this method.

Here is a statement from our lab about the USGS method.

"Schedule 1383 has an RL of 6 ug/L and it is similar to EPA 8270. I scanned in the method in case you need it and Duane included links to Branch of Quality Systems pages that have quality information. One link shows the charts from their blind sample program and the other shows our Long-Term method detection level data. Since our MDLs are based on samples submitted just like regular samples over the course of months, our MDLs capture more of the long-term variability than the EPA MDL required by CFR 136 app. B. I think method 8270 just requires 7 replicates on different calibration curves and that can happen over a few days."

Anyhow, the big question is what do you want to do?

Thanks.

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Cell 817-253-0356[attachment "OFR 93 125 S1383.pdf" deleted by Christy Warren/R6/USEPA/US]